



DESIGNEE NEWSLETTER for January 2008

A quarterly publication designed to serve the Examiner, Designee, and Instructor community.

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FROM THE DESK OF THE MANAGER AFS-640

Hello again from AFS-640. We here hope that you had a wonderful holiday season and that the New Year brings you health and happiness. Here at AFS-640, the new year finds us busy updating our seminars to provide the designee community with the very best training we can.

Recent changes to FAA policy have required that we conduct testing at the end of each training seminar. This testing will be phased in over the next few months, and all training seminars will have testing by the first of October 2008. This testing will require a passing grade of 70 percent to receive credit for the training. As specific policy is written about testing, we will inform the designee community via email.

Another change that some of you will notice is in our seminar locations. While we strive to travel to each Region, we may no longer come to your local FSDO. Please watch our seminar schedule for a seminar near your location.

I would also like to thank each of you who have taken the time to write to me and give me feedback on our seminars and the newsletter. I hope that I continue to hear from you in the future. Please feel free to contact me at anytime with your concerns.

Jay Kitchens

Manager, Designee Standardization Branch, AFS-640

DESIGNEE PROGRAM UPDATE

The United States (U.S.) has the highest volume of commercial air commerce and general aviation activity and the highest number of active pilots in the world. Forecasts indicate that by the year 2015, the airline industry will carry more than 1 billion passengers a year. The FAA wants to keep pace with this expansion of business and recognizes the need to implement revised training for designees that perform certification and inspection activities on its behalf.

The FAA designee program is next in line for a substantial change in the method of administration. Revised procedures and policies are being incorporated into new online and face-to-face training courses. These new courses are being developed with the assistance of education professionals and with their help; the FAA designee program will keep pace with our expanding industry. The designee program has also been mandated to include testing in future training. Designee testing begins during the initial course and will continue through the recurrent seminars. Failure to successfully pass a test could jeopardize the renewal of a designee's status. AFS-640 personnel have varied backgrounds and experience from every facet within the aviation community, and we are busy revising course material and writing test questions.

Developing new courses and tests is not easy, so management has assigned Instructional Systems Specialists (ISSs) also known as Instructional Systems Designers (ISDs) to assist in the process. ISSs are experienced in designing and developing training materials in all types of media. They write, revise, and consult with Subject Matter Experts (SMEs) on lesson development and training quality issues. They also edit courses and lessons for grammar, style, layout, design, readability, and conformity to educational/FAA standards and course objectives. ISSs ensure new courses are valid and ready for delivery by conducting operational tryouts and prototype classes. The Designee Standardization Branch (AFS-640) ISSs also maintain reports or tracking sheets to monitor workflow, status, and completion and delivery dates of courses.

Another program known as Organization Designation Authorization (ODA) is replacing the Delegation Option Authorization (DOA), Designated Alteration Stations (DAS), Organizational Designated Airworthiness Representatives (ODAR), and the Special Federal Aviation Regulations (SFAR) No. 36 delegation programs. Using the experience gained with individual and organizational designees, the FAA has designed the ODA program. AFS-640 and the Delegation & Airworthiness Programs Branch (AIR-140) are working together to develop training for this program.

As these programs and courses are designed and developed using the ISD process, they will rank high in technical accuracy, consistency, and quality. AFS-640 has plans to revise all of the designee training programs over the next few years.

Dale Hansen, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

DESIGNEE REGISTRATION SYSTEM (DRS) HOME PAGE

You may have noticed that the [Designee Registration System Home Page](#) has received a makeover. The website is easier on the eyes, easier to navigate, and has some new features that are worth noting.

Designated Mechanic Examiners (DMEs) are now able to access the new Oral Question Generator through the website. This means that they no longer need the old O&P Test Booklets, which should be turned in to their FAA Managing Office once they have been granted access to the online system and have become familiar with it. Keep in mind that downloaded or printed test material from the online system is subject to the same security requirements as the O&P Test Booklets were.

In the near future, we will have a system setup to allow DMEs to contribute questions directly to the data bank through the website so that we will have more choices and better questions when creating a Mechanic Oral test. In the meantime, if you have questions that you would like to contribute, you can [email them to us](#).

Also, product certification designees who need access to the Electronic Data Recovery System (EDRS) can access this website through the DRS Home Page. After you log in and identify yourself as a DAR, you will see a link that asks if you want to request access to the EDRS. When you click on this link, an autogenerated email will be sent to the Designee Standardization Branch (AFS-640) staff. We will then verify your designation and grant you access to the system. We will send an email notification to you, when this feature becomes available.

Speaking of email, the email address that you provided when you created your user profile will be used in the future for all designee correspondence from AFS-640. This means you no longer need to signup separately through the old Designee Notification System (DNS) to receive emails from us; however, we will continue to use DNS for a while until everyone has had a chance to signup in the new system. If you are having trouble receiving emails from us, you might want to check out the Email Instructions link on the DRS Home Page. This link provides detailed instructions on configuring the spam filters used by the most popular email provider so that you will receive messages from our system.

We hope you find the new website helpful and user friendly. We will continue to add features to the system in order to help you in the important work that you do. We value your feedback on the new

website, as well any other issues related to the FAA's designee programs. Please provide us with your comments or suggestions through our new [FAA Designee Feedback](#) system.

Larry West, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

EXPORT OF CLASS II AND CLASS III PRODUCTS LOCATED OUTSIDE OF THE UNITED STATES

On November 26, 2007, AFS-640 advised the Designee community of the amendment to Title 14 of the Code of Federal Regulations, section 21.325, via the Designee Notification System (DNS). This new amendment to the regulation became effective January 14, 2008. Our phones have not stopped ringing, nor have the emails slowed regarding clarification and applicability of this new change to the regulations.

14 CFR section 21.325, is entitled "Export Airworthiness Approvals," and recognizes under subparagraph "b" those "*Products which may be approved.*" Subparagraph "b" identifies what products may be exported, and is undoubtedly one of the most crucial sections regarding export of aeronautical products. Prior to this amendment, subparagraph b, 3, clearly prevented export of Class II and Class III products unless they "*were manufactured and located in the United States.*" This section of the regulation proved to be a huge obstacle for Production Approval Holders (PAH) with manufacturing facilities and/or distribution centers overseas. Subparagraph 21.325,b,3, prevents export of Class II products from overseas facilities and requires application for a formal exemption to this section of the regulation if the PAH wished to do so. As a result, many exemptions to this section of the regulation were issued by the FAA. These exemptions expire and require the PAH to re-apply every few years. The requests for exemptions require constant review and renewal by FAA personnel in Headquarters and essentially constituted rule by exemption. This was one reason the change was made to section 21.325.

The change to section 21.325, specifically subparagraph b, 4, now states "Class II and III products located outside of the United States (*may be approved*) if the FAA finds no undue burden in administering the applicable requirements of Title 49 U.S.C. and this subchapter." When you first read the language in the new change, it clearly appears to authorize export of Class II and Class III products located outside of the U.S., as long as it does not place an undue burden on the FAA to manage such an export. FAA Order 8100.11A, Decision Paper Criteria for Undue Burden and No Undue Burden Determinations Under 14 CFR Part 21, describes the process to be used by local offices to make undue burden determinations. Technically speaking, that is exactly what was authorized. But, as a designee with Function Code 03, 19, 20, or 32, are you now permitted to travel outside the U.S. and Export Class II and Class III products based solely on the language in section 21.325,b,4?

To answer this question, we need to review guidance contained in Order 8100.8C, Designee Management Handbook. All designees, in the applicable orientation section of Order 8100.8, "...are reminded to perform only authorized functions within the limits of their authority/" Furthermore, any deviation from the guidance material contained in Order 8100.8 "...must be coordinated and approved

by AIR-200 for Maintenance and Manufacturing Designee issues.” A review of the individual function codes is necessary to clarify whether or not a designee is really permitted to travel outside the U.S. and Export Class II and III products, with specific regard to DMIRs expecting to be appointed overseas. FAA Order 8100.8C, paragraph 408(b) states, “The country where the appointment will be made must have, or currently be working toward, a bilateral agreement with airworthiness provisions with the United States.”

Function Code 03, for DMIRs states: “Issue export certificate of airworthiness and export approval tag in accordance with 14 CFR part 21, subpart L, for the PAH after determining that the products and parts submitted by the PAH conform to the type design, are in a condition for safe operation, and comply with the special requirements of the importing country.”

A “NOTE” follows Function Code 03, which states, “14 CFR part 21, subpart L, restricts the export of Class I, II, and III products to certain limitations or conditions. These specified conditions should be thoroughly reviewed, understood, and satisfied before a DMIR performs these functions.”

The language in Function Code 03, for DMIRs, is relatively clear with respect to their Export of Class II and III products. Basically, the Function Code indicates they can export for the PAH, as long as certain determinations are made, and the export tag is issued in accordance with the requirements contained in Part 21, subpart L.

Subpart L contains the regulatory guidance for “Export Airworthiness Approvals.” So, may a DMIR export a Class II or Class III product from outside the U.S.? Based on the language in Function Code 03, and the new allowance for such action in the revised section 21.325,b,4, it appears that a DMIR could export Class II or III products from outside the U.S. at the PAH, as long as there was no undue burden on the FAA to monitor such activities.

What about Maintenance and Manufacturing DARs? Are they now authorized to export Class II and Class II articles from foreign soil? Function Codes 19 and 20 for DAR-F, and Function Code 32, for the DAR-T, read exactly the same except that a Manufacturing DAR-F is limited to “original” export and the Maintenance DAR-T is limited to “recurrent” export.

Function Code 32 states, “Issue *recurrent* export airworthiness approvals for Class II products that are *manufactured and located* in the United States in accordance with part 21, subpart L.” The language for the Manufacturing DAR is exactly the same, except the word “*recurrent*” is changed to “*original*.” We have a Function Code that limits *where* a DAR is permitted to export Class II products. A DAR is only permitted to issue an airworthiness approval tag for a Class II product *if* the product is manufactured *and* located in the U.S. Even though the 14 CFR now permits export approval of Class II products from outside the U.S., the designee is bound to the language of the function code. To solve this dilemma, AIR-200 has issued the attached Deviation Memorandum authorizing local FAA offices to amend a designee’s Certificate of Authorization, when appropriate, to allow activity outside the U.S.

There is also some concern over the language in section 21.325,b,4, which speaks to “undue burden.” The FAA must find no undue burden in administering the applicable requirements of Title 49 U.S.C. and subchapter L. That phraseology also needs to be further clarified before designees should expect to export from overseas.

Export of Class III products from outside the U.S. is also addressed in the new change to section 21.325,b,4. Currently, only Manufacturing designees are authorized to issue export airworthiness approvals for Class III products. Function Code 03 is the proper function code for export of Class III products if you happen to be a DMIR. As discussed earlier, there is no requirement in Function Code 03 that the products be manufactured and located in the U.S. In accordance with section 21.325,b,4, a DMIR could be permitted to export Class III products from overseas as long as he or she does so for the PAH.

Manufacturing DARs with Function Code 20 are also authorized to export Class III products. Function Code 20, as expected, contains certain restrictions. Once again, the Manufacturing DAR is limited to issuance of only “*original*” export approvals, and export of Class III products that are “*manufactured and located in the United States.*” The AIR-200 Deviation Memorandum also covers amending a designee’s COA letter for Code 20, when appropriate.

We are all aware of the difficulty in actually making a change to a CFR. In addition, we are also aware that we use Orders to spell out *how* we are expected to meet the intent of certain regulations. With the ever-changing dynamics of aviation worldwide, especially within the European Union, the need for new guidance to allow us to interact within this environment becomes paramount. Furthermore, this new guidance must be able to be in place rather quickly. With this in mind, we should be very careful in analyzing new policy and guidance to ensure we are within the parameters of all policy addressing the subject. The best way to ensure compliance is to have good lines of communication with our Managing Offices, understand our limitations as mandated in our Function Codes, and request clarification whenever we have questions.

Your Managing Office, if unable to answer questions that may arise concerning new policy, will send those questions forward to the Regional Offices, who will forward those questions on to Headquarters if they are unable to provide a response. Additional clarification has now been provided by AIR-200 for this new regulatory change. The AIR-200 Deviation Memorandum will be posted on the Designee Notification System as soon as possible.

One other question has been raised concerning the change to section 21.325. The new language in section 21.325,b,4, does not specifically speak to products manufactured in the U.S. This obvious deletion has led some to believe that this change allows export of Class II and Class III products that were manufactured in a foreign country. This assumption is *not* correct. We still cannot export an Airbus part. Any Class II or III products exported must have been produced under an FAA production approval, i.e. a Production Certificate (PC), produced under an Approved Production Inspection System (APIS), Technical Standard Order Authorization (TSOA), or Parts Manufacturing Approval (PMA).

In summation, based on current policy and guidance, only a DMIR with Function Code 03 is permitted to export Class II or Class III products from overseas. Even with this authority, Managing Offices must verify the intent of the language concerning “undue burden” before allowing DMIRs to export Class II and Class III products from an overseas location. Be advised, there are still current exemptions issued that allow Export of Class II products from overseas locations.

Based on the current language in Function Codes 19, 20, and 32, a DAR-T or DAR-F should not export from outside the United States unless they receive a deviation to existing function code language based on the Deviation Memorandum, dated January 25, 2008, from AIR-200. For our Flight Standards DAR-Ts located overseas who may view this new change to the regulation as an opportunity to obtain an additional function code; be advised of the National Examiner Board (NEB) policy regarding “recent experience.” Applicants for new function codes must show relevant experience in the past 2 years for the function code requested.

Designees with appropriate Function Codes, who anticipate export of Class II and Class III articles in the future from overseas locations, should work closely with their Managing Offices to have their COA letters amended to delete the existing prohibitive language. Please feel free to contact the Instructor Staff of AFS-640 if further clarification is required.




Federal Aviation Administration

Memorandum

Date: JAN 25 2008

To: All Manufacturing Inspection Offices, All Manufacturing Inspection District Offices, All Flight Standards District Offices

From: Frank P. Paskiewicz, Manager, Production and Airworthiness Division, AIR-200 

Prepared by: Airworthiness Certification Branch, AIR-230

Subject: INFORMATION: Deviation to Order 8100.8C for function codes 19, 20 and 32.

This memorandum authorizes a deviation to Order 8100.8C, paragraph 1407(a)(10) and Appendix 1, Figure 5, Function Code 19 and Function Code 20, to allow designee activity outside the United States as authorized by 14 CFR Part 21.325(b)(4) effective January 14, 2008.

Order 8100.8C, paragraph 1407(a)(10), Function Code 32 will be changed to delete the words "located in the United States" with the next change to Order 8100.8C. In the interim, managing offices may amend appropriate designee authorizations to remove restricting this activity to the United States.

Appendix 1, Figure 5, Function Code 19 and Function Code 20 will be changed to remove the words "manufactured and located in the United States" with the next change to Order 8100.8C. In the interim, managing offices may amend appropriate designee authorizations to remove restricting this activity to being located in the United States.

This memorandum replaces AIR-200 memorandum on the same subject sent out electronically on January 22, 2008.

If there are further questions, please contact a member of our Airworthiness Certification Branch, AIR-230, at (202)-267-8361.

Brad Outlaw, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

FAA GRANTS EXEMPTIONS TO TITLE 14 OF THE CODE OF FEDERAL REGULATIONS (14 CFR) PART 21, SECTION 191(I)(1)

On January 23, 2008, the FAA granted requests from two aviation organizations to allow certification of experimental light-sport aircraft beyond the January 31, 2008, deadline as prescribed in 14 CFR section 21.191(i)(1). Those two aviation organizations are the Aero Sports Connection Inc. (ASC) and the Experimental Aircraft Association (EAA).

Applicants wishing to use these exemptions must be an active member of either ASC or EAA and will be required to contact the ASC or EAA to apply. Applicants using these exemptions **MUST** have made application for registration with the Aircraft Registration Branch (AFS-750), and that application **MUST** have been received by AFS-750 prior to close of business January 31, 2008. Aircraft that have been registered may not be operated until an airworthiness certificate has been issued. FAA inspectors and DARs that hold Function Code 47 will be required to contact the organization issuing the exemption to verify that the applicant is authorized to use the exemption.

In the near future, the ASC and EAA will provide more details on the application process.

Copies of these exemptions may be found at: <http://www.regulations.gov/search/index.jsp>.

The exemption docket number for the ASC is FAA-2000-8425, and the exemption docket number for the EAA is FAA-2007-0382.

If you have any questions, please contact the ASC at (269) 781-4021, or contact the EAA at (877) 359-1232.

Both exemptions will expire on January 31, 2010, unless they are superseded or rescinded before that date.

Van Stumpner, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

HOLDING THE LINE (PRACTICAL TEST STANDARDS INTEGRITY AND DISCIPLINE)

As instructors, we are familiar with the evaluation process and know it is an important tool for measuring how much our students have learned. We also use that process in identifying and eliminating deficiencies in their training. However, as instructors, we may evaluate only about 10 percent of the time. The rest of the time we are introducing new tasks, reviewing the ones previously accomplished, and practicing those tasks until our students are able to meet or exceed the Practical Test Standards (PTS). Unfortunately for those of us who like to instruct, when we assume the role of the evaluators, we are prohibited from instruction. We can ask questions, set up scenarios, or request that an applicant demonstrate a maneuver then evaluate their answers or actions. We can provide instruction only in the debriefing and only when the outcome of the test has been determined to be satisfactory or unsatisfactory.

Title 14 of the Code of Federal Regulations (14 CFR) part 61, section 43, defines what is expected of the applicant in a practical test. It states that they have to perform the task specified in the areas of operation for the certificate or rating sought, and be able to meet the approved standards. They must also demonstrate mastery of the aircraft with the successful outcome of each task performed never seriously in doubt; and if they fail any area of operation, that they fail the practical test. As a Designated Pilot Examiner (DPE), you have the responsibility to administer and evaluate the applicant to determine whether they were able to meet those standards.

You may have heard the PTSs billed as a textual description of the worst pilot that should be out in the National Airspace System (NAS). When I was an Assistant Chief at a 141 flight school, I used this analogy often to make the point that our instructors should train an applicant for a new certificate or rating to a standard that exceeds the PTS. That analogy made even more sense in the fall of 2004, when I went to work at the Oklahoma City Flight Standards District Office (FSDO) as an Aviation Safety Inspector (ASI).

As an Inspector, I was amazed at the number of accidents, incidents, and occurrences that happened on a regular basis. It seemed that these reports came across my desk daily. There were pilot deviations including: runway incursions, climbing through an assigned altitude, and not following Air Traffic Control (ATC) instructions. When the weather was nice, in the spring and summer months, a weekly buzzing event was inevitable as well as gear-up landings, pilot assists, Visual Flight Rule (VFR) pilots caught in Instrument Meteorological Conditions (IMC), and landing accidents due to loss of control. The list goes on. Most ended with either an enforcement action in the form of suspension, re-examination under Title 49 USC Sec. 44709, a warning letter, or remedial training. The good news was that most of these people were not hurt, but a few were not so lucky. The point was hammered home to me the first time I helped investigate a fatal accident. If there was a positive side of this tragedy, it was that no one else occupied the other five seats. It was then that I realized how important our jobs are as Inspectors and DPEs.

DPEs have long been referred to as the “Gate Keepers,” because the DPE holds the key to the final gate that the applicant has to pass through before they can be allowed, unsupervised into the NAS. It is the last chance that we will have to evaluate an airman’s knowledge, skills, and abilities; and if needed, refer them back to a flight instructor to correct deficiencies.

Unfortunately, we have all been in a position where we probably passed an applicant that in the back of our mind was the proverbial “accident looking for a place to happen.” They met the standards, but you just had a gut feeling about their actual competency.

If you ever have that feeling, before you fill out the temporary certificate, ask yourself a couple of hard questions: 1.) Would you allow your close friend or loved one (who is not a pilot) to fly with this applicant? 2.) Would you feel comfortable if the applicant (who is a newly-minted Private Pilot, with the ink barely dry on their temporary certificate) decided to load up his family in a high-performance single-engine airplane for a 2-day trip across the Rocky Mountains to Anaheim, California?

Remember that it is those people who are counting on you to administer a good, valid practical test. Don’t let them down.

Todd Burk, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

MINIMIZE CUSTOMER COMPLAINTS

The FAA is continually advocates good customer-service incentive. Pilot applicants are the FAA’s customers, as well as your’s.

As Designated Pilot Examiners (DPEs), you can do your part by providing a thorough telephone briefing when scheduling a practical test. Make a checklist consisting of things that your applicant should know *before* he or she comes to see you for that “Special Day.”

- Let them know how much your fee is going to be.
- If a retest should become necessary, let them know how much your retest fee is going to be.
- Let them know that if they arrive for their appointment and there happens to be a problem with paperwork, endorsements, training requirements, or flight time, *and you intend to charge a fee for showing up to conduct the test*, tell them during your phone briefing how much that fee will be.

Don’t give them any surprises on the day of the test that you should have briefed them about over the phone when he or she made the appointment.

Above all, you are a representative of the Administrator, so conduct the test in a professional manner. Let your reputation be known to the aviation public as a DPE who is very thorough, but very fair.

Ken Pannell, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

MONTHLY FEATURE – ONE QUESTION

WHY DO DESIGNEE STANDARDIZATION SEMINARS SELL OUT SO QUICKLY?

AFS-640 conducts designee standardization seminars. During the seminars, we *teach* national policy, we *don't make* national policy. Therefore, we do not typically answer “WHY” questions during the seminars. However, we will bend the rules and answer this one “WHY” question.

Why do AFS-640's seminars sell out so quickly?

Our seminars sell out quickly because:

1. FAA orders require designees to attend, and the number of designees grows each year.
2. More companies recognize that attending our seminars benefits them. Therefore, they enroll their representatives into our seminars. Their representatives learn how to attain more authorized functions, how to carry out the delegation, how to become nationally standardized, stay current with FAA policies, and network.
3. New FAA policy states that Aviation Safety Inspectors (ASIs) must attend the seminars.

For these reasons, our seminars sell out months in advance. AFS-640 has made it convenient for you to enroll. We have a new website that allows you to create and maintain your own profile, and register for a seminar. From <http://www.faa.gov>, you are only three clicks away to enrollment in a seminar near your own managing office. We have listed future seminars, so that you can plan well ahead.

We'll see you at the next AFS-640 seminar.

Neal Rice, Aviation Safety Inspector
Designee Standardization Branch, AFS-640

ORAL QUESTION GENERATOR DATA BANK

As many of you are aware, the Technical Personnel Examiner (TPE) Designated Mechanic Examiner (DME) Oral Question Generator Data Bank is up and running on the Designee System Home Page: <https://av-info.faa.gov/dsgreg>.

From the feedback we are getting from the current users, the system is working very well. There are still a large number of DMEs that have yet to gain access to the system. DMEs are currently allowed to use the old Oral and Practical (O&P) Test Booklets. This will end soon and the test booklets will be recalled.

The next revision of Order 8610.4, Designated Mechanic Examiner Handbook, requires the DME to use questions he or she develops and/or questions downloaded from the Oral Question Generator Data Bank. Use of the O&P Test Booklets will be prohibited. Disposition instructions for the O&P Test Booklets will be issued at a later date.

Also, the Airman Testing Standards Branch, AFS-630, along with the Designee Standardization Branch, AFS-640, are soliciting DMEs to submit questions that will be added to the Oral Question Generator Data Bank. Your submission of questions is strictly voluntary. The goal is to have a larger data bank of questions that reflect the current aviation industry. Submitted questions should contain at least the Subject Area, the applicable Practical Test Standard (PTS) Objective 1 element, the question, the answer, and the reference where the answer was obtained. These questions can be emailed to: richard.j.fletcher@faa.gov.

Richard J. Fletcher, Aviation Safety Inspector
Designee Program Manager, Designee Standardization Branch, AFS-640

QRS-11 GYRO CHIP SAGA CONTINUES

Some of you may recall the article in the April 2004, Designee Newsletter regarding the QRS-11 Quartz Angular Rate Sensors installed in commercial aircraft. We had serious concerns over export of aircraft with these sensors installed, as the sensors were identified in the United States Munitions List (USML) and regulated by the International Traffic in Arms Regulations (ITAR) under the purview of the Department of State. The article was more of a warning to designees about the QRS-11 chips in certain instrument systems in commercial aircraft, and the requirement by the Department of State, at the time, to obtain a license to export commercial aircraft with these sensors installed. A little history may provide some perspective to the issue. The QRS-11 family of chips was developed in the late 1980s without a specific end use identified. The first use of the QRS-11 chip was in the Maverick missile in early and mid-1990s during which time the Maverick-specific chips were reviewed for commodity jurisdiction several times and each time were determined to be subject to Department of State jurisdiction. Late in 1990, the QRS-11-100 was selected for use in a new family of digital Standby Flight Instruments that provided altitude, attitude, and airspeed for use by the pilot if the primary system became inoperative. These Standby Flight Instruments were built by L-3, Meggitt, and Thales. They were civil-certified and were well received by the Civil aircraft manufacturers. It is not clear if the instrument manufacturers were aware of the previous jurisdiction determination of the QRS-11, but in the case of Meggitt and Thales, the chips were received under Department of State license. In the summer of 2003, the Department of State became aware that Boeing, Airbus, and many other airframe manufacturers were using the QRS-11 based Standby instruments in their civil aircraft. The government responded by notifying the manufacturers and operators that export of all such instruments and aircraft that contained such instruments were subject to Department of State licensing. In January 2004, the Department of State published a Federal Register notice that moved the QRS-11-00100/101 chip to the Department of Commerce when used in a Civil Standby Instrument System, or when exported for use in the manufacture of such a system. In the Federal Register of February 9, 2004, the Department of Commerce published regulatory guidance on the export of QRS-11 chips, instruments that incorporated QRS-11 chips, and aircraft that incorporated such instruments. Left unresolved by those Federal Register notices was the use by Meggitt of the QRS-11 chip in Primary Flight Instruments Systems known as Attitude,

Distance Heading Instrument Systems. These systems, used primarily on small aircraft, were addressed in the Department of State published Federal Register of June 7, 2007, and the companion Commerce Department FR of November 7, 2007.

We had hoped that we could generate enough interest in the sensors that the FAA would create a list of instrument systems that employed these sensors, and even possibly identify the aircraft in which the QRS-11 sensors were used or could be used. All this was done in an effort to advise designees of the significance of items identified on the USML, and the consequences of exporting aircraft that may contain devices identified on the USML without an export license from the Department of State.

Now it seems as if our concerns have been validated to some degree, as we were notified that Boeing has been fined \$15 million for shipping between 2000 and 2003, what were at the time classified as military significant technology to China and other countries. Apparently the Department of State's Directorate of Defense Trade Controls (DDTC) allegation letter also claimed that Boeing exported the aircraft after being warned to stop. An excellent article addressing Boeing's dilemma, written by Mr. John J. Brodbeck, titled "Does this Require a License?" It was published in the November 30, 2007, release of "The Hotline," on page 11. The "Hotline" is an emailed newsletter released by the Aeronautical Repair Station Association (ARSA) which always contains exceptional articles about a variety of aeronautical subjects, often with regard to designees.

We have been advising designees in our Initial and Recurrent Seminars of other Government Offices and Agencies that have responsibilities regarding export of aircraft and aeronautical products and parts for many years. These government agencies include the Department of the Treasury, Office of Foreign Assets Control (OFAC), the Bureau of Industry and Security with the Department of Commerce, the U.S. Department of State, Directorate of Defense Trade Controls, and U.S. Customs. The reason we advise designees of these different Government agencies is because there are regulations, other than those mandated by the FAA, that affect export of aeronautical products. There are restrictions against exporting to certain countries as well as to or for certain persons. Most of the restrictions are in regard to the exporter specifically, but if a designee were to be involved in export of aeronautical products to a denied person or a sanctioned country, that designee could possibly bear some responsibility and could be included in any charges along with the exporting person. That was the primary reason for the original article regarding the QRS-11 Quartz Rate Sensor.

When we were advised of Boeing being fined for exporting aircraft which contained the QRS-11 sensors, we felt the need to investigate the situation further and determine the current status of any regulations concerning QRS-11 sensors. As FAA and designees, we are not normally involved with Export Administration Regulations (EAR); therefore, we were not aware of a final rule affecting the QRS-11 sensors that was issued back in February 2004. The Department of Commerce, Bureau of Industry and Security, 15 CFR Parts 734, 740, and 774, Docket No. 040202032-4032-01 is entitled, "Licensing Jurisdiction for QRS-11 Micromachined Angular Rate Sensors." This final rule amends the EARs to transfer jurisdiction of the QRS-11 Angular Rate Sensors from the Department of State to the Department of Commerce. Why is that significant? The Department of State published a rule amending the International Traffic in Arms Regulations (ITAR) to remove from the USML jurisdiction for certain quartz rate sensors when the sensors are integrated into and included as an integral part of a Commercial

Standby Instrument System (CSIS) for use on civil aircraft or exported solely for integration into such commercial standby instrument systems. The significance of this final rule is that the licensing jurisdiction for the QRS-11 sensors for commercial applications now falls under the Department of Commerce, rather than the Department of State.

This is when the sensors are of the type described in the EAR under ECCN 7A994 or for an aircraft of the type described in ECCN 9A991 and that incorporate a CSIS that has such a sensor integrated or exported solely for integration into such a system. In all other cases, the QRS-11 sensors are subject to the licensing jurisdiction of the Department of State, Directorate of Defense Trade Controls. In short, this means that the QRS-11 sensors used in civil applications may no longer require a license for export. We must be very careful in our interpretation. While it is true that the Department of Commerce has resolved the issue with the QRS-11-00100/101 in standby instruments and primary instruments systems and the QRS11-00050-443/569 in automatic flight control systems, they have not yet addressed the jurisdiction for such systems used in simulators or other potential civil applications. That is the good news. If the sensor is being exported for use in the manufacture of a military system or is in a military aircraft, it must be treated as military and the exporter will need a license from the Department of State. As the designee, you are not the exporter, but you will be the one signing the export document as a Representative of the Administrator. If you are not sure of the classification of an aircraft or part, you can request from the exporter the parts Export Control Classification Number (ECCN). This number is available from the manufacturer and is critical in determining whether an aircraft or part may be shipped without a license. In Mr. Brodbeck's article in the November issue of the ARSA "Hotline", he suggests reading Export Administration Regulations Part 736 before export of any aircraft parts that may include military piece parts. You should also be aware that a foreign-built aircraft containing the QRS-11 is subject to U.S. export controls since there is no de minimis exception for such aircraft (see part 734.4). In general, the Department of State uses what is known as a "see through rule" which says that without regard to the level of incorporation, if there is a part in a system for which they claim jurisdiction, that part must be licensed for export by the Department of State. In addition, if you suspect a military application, the Department of State's Directorate of Defense Trade Controls (DDTC) may be contacted for a jurisdiction determination. The DDTC telephone number is 202-663-2719. Furthermore, the website address for the Bureau of Industry and Security (BIS) of the Department of Commerce may be searched if you are unsure of a part's classification. To submit a jurisdiction request, you can go to: <https://www.bis.doc.gov/SNAP/index.htm>

Basically, the exporter is the one responsible for determining whether or not an export license is required for a particular aircraft or component. The exporter is also responsible for determining who may have the proper jurisdiction for issuing such a license; i.e. the Department of Commerce or the Department of State. But, if you are the designee signing the export document, thereby assisting the exporter in the process, we suspect you could also be included if any charges were ever made.

Based on the change to the EARs, moving jurisdiction on the QRS-11 sensors from the Department of State to the Department of Commerce when used in nonmilitary applications, the designees ultimate

responsibility has been somewhat reduced. But, as you can tell from the aforementioned information, determining jurisdiction could still be difficult. If you have questions about specific aircraft or parts, please use the telephone number and website address previously provided to assist in making the proper decision as to whether or not an Export License is required of the exporter.

I want to thank Mr. Gene Christiansen with the Office of Strategic Trade, Bureau of Industry and Security, U.S. Department of Commerce, for his valuable assistance in locating and interpreting the many articles and other necessary data to complete this article.

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TRANSPORT CANADA'S (TCCA) ACCEPTANCE OF FAA FIELD APPROVALS

The Special Requirements for Canada, identified in AC 21-2J, appendix 2, specifically paragraph 2.4, Supplemental Type Certificates, states, "Design approvals granted under the FAA field approval procedures (FAA Form 337) are NOT recognized by TCCA." "Such design changes will be treated on a case-by-case basis depending on complexity, compliance with applicable requirements, and possible impact on continued safe flight and landing. Accordingly, a separate TCCA approval may be issued, depending on findings." The language clearly indicates that field approvals are not accepted without extensive review. The date on the Canadian Special Requirements is June 27, 2000.

There is also a Bilateral Aviation Safety Agreement (BASA) between the governments of Canada and the United States (U.S.). The BASA contains Implementation Procedures for Airworthiness (IPAs). In the fall of 2006, a Canadian Aircraft Certification management team requested that a risk assessment be conducted to determine if major alterations and repairs approved by the FAA using the field approval process may be accepted without review.

The risk assessment was completed, and based on that decision, along with discussions with the FAA, Transport Canada will apply Section III, paragraph 3.3.3 of the IPA to include the following language.

"Regardless of the product's State of Design, FAA approved or FAA accepted alterations per 14 CFR Part 43 on a product exported from the U.S.A., are considered to be Transport Canada approved at the time of import to Canada."

There is an exception to this. Certain aircraft that were operated in the State of Alaska had alterations incorporated using the FAA field approval process between October 1, 2003, and May 21, 2005, which may have resulted in the aircraft airworthiness certificate having an operating limitation imposed. This operating limitation may have limited future operation of the aircraft only within the boundaries of the State of Alaska. This is discussed in detail in FAA Order 8130.32, Airworthiness Certification Requirements for Certain Aircraft Operated in the State of Alaska. An applicant intending to import these aircraft into Canada must comply with the criteria to remove the operating limitation as specified in the procedural requirements of the Order 8130.32.

Transport Canada will accept such FAA alteration data when substantiated with an FAA Form 8100-9, Statement of Compliance with Airworthiness Standards, FAA Form 8110-3, Statement of Compliance with the Federal Aviation Regulations, or FAA Form 337, Major Repair and Alteration, with block three (3) completed, and properly recorded in the maintenance records of the aircraft.

Designees involved with the export of aircraft into Canada should find this newfound acceptance of field approvals to be an advantage. However, they could run into problems explaining this acceptance when a comparison is made to the published Special Requirements. We intend to advise AIR-200 of this recent change to paragraph 3.3.3 of the Canadian IPAs, and hopefully the language in the Special Requirements will be updated accordingly. In the interim, we should feel comfortable in knowing that the IPAs should be used in conjunction with the Special Requirements, but if any conflict exists between the two, the language in the IPAs should prevail. The TCCA has identified this change on their website. The title of the article is "TCCA Review of FAA Field Approvals" and can be located at the following address: <http://www.tc.gc.ca:80/CivilAviation/certification/delegations/Perspectives/TCCA-review.htm>

This is a perfect example of why designees and FAA inspectors, involved with export of aeronautical products, need to research all available resources to determine exactly what is required by the importing country's Civil Aviation Authority. In addition, the research should discover what limitations may exist with respect to denied persons and restricted countries. This kind of information is not available through the FAA. One needs to go to the Department of Commerce, Bureau of Industry and Security for the Denied Persons List, and the Department of Treasury site provides a list of Sanctioned countries. The Department of State, Directorate of Defense Trade Controls, has pertinent information regarding export of products that could be considered defense materials. Also, in line with the subject of this article, a look at the Civil Aviation Authorities website can provide very useful information about the current state of affairs regarding export into their particular country. I would suggest that the CAA's website regarding import requirements could contain more current information than the FAA's website concerning the same subject. We all know it takes time for new information to be posted on government websites. As a designee, your job will be much easier and the exporter should be able to save considerable money with this new policy from Canada regarding their acceptance of FAA field approvals. Some designees have already used this new policy when exporting to Canada, and the CAA personnel in Canada are aware of this change in policy.

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